CLAIMS

1. Polypeptide molecules containing at least 10 consecutive amino acids of the amino acid sequence shown in Figure 2, the following polypeptides being excluded:

- RDELFNELLNSVDVNGEVKENILEESQVNDDIFNSLVKSVQQEQQHNVEE
- VEESVEENDEESVEENVEENVENNDDGSVASSVEESIASSVDESIDSSIE-ENVAPTVEEIVAPTVEEIVAPSVVEKCAPSVEESVAPSVEESVAEMLKER (729S)
- RDELFNELLNSVDVNGEVKENILEESQVNDDIFNSLVKSVQQEQQHN
- DELFNELLNSVDVNGEVKENILEESQ, (NRI)
- LEESQVNDDIFSNSLVKSVQQEQQHNV, (NRII)
- VESVAPSVEESVAPSVEESVAENVESSV. (729RE)

2. Molecules according to Claim 1, characterized in that they contain at least 20 consecutive amino acids of the said sequence.

3. Molecules according to Claim 2, characterized in that they contain at least 50 consecutive amino acids of the said sequence.

4. Polypeptide molecule displaying at least 70% homology with one of the molecules of any one of Claims 1 to 3.

5. Polypeptide molecule, characterized in that it displays at least 70% homology with the following sequence:

Leu Leu Ser Asn Ile Glu Glu Pro Lys Glu Asn Ile Ile Asp Asn Leu Leu Asn Asn Ile (CT1).

6. Polypeptide molecule according to one of Claims 1 to 4, characterized in that it displays at least 70% homology with the sequence depicted in Figure 3.

7. Immunogenic composition, characterized in that it contains at least one polypeptide molecule according to any one of Claims 1 to 6 and at least one pharmaceutical vehicle.

8. Antimalarial vaccine composition containing, among other immunogenic principles, a polypeptide molecule according to one of Claims 1 to 6.

9. Vaccine composition according to Claim 8, characterized in that it contains, in addition, a molecule containing at least one epitope and which originates from the group consisting of the LSA-1, SALSA or STARP molecules.

10. Composition according to Claim 9, characterized in that it contains at least two immunogens, the first being chosen from the following polypeptides:

- that of Figure 2,
- NRI,
- NRII,

and the second being chosen from the group consisting of SALSA, SALSA I and SALSA II.

11. Polyclonal or monoclonal antibodies which specifically recognize the polypeptide molecules according to any one of Claims 1 to 6.

12. Method of in vitro diagnosis of malaria in an individual likely to be infected by P. falciparum, which comprises the bringing of a tissue or biological fluid taken from an individual into contact with a molecule according to one of Claims 1 to 8, under conditions permitting an immunological reaction, [lacuna] the said polypeptide molecule and the antibodies possibly present in the tissue or the biological fluid, and the in vitro detection of the gene [sic] antibody complexes possibly formed.

13. Method according to Claim 12, characterized in that the tissue or biological fluid is brought into contact with a mixture of polypeptide molecules corresponding to one of Claims 1 to 6 and other molecules originating from antigens of the sporozoite stage, namely LSA-1, SALSA or STARP.

14. Method of in vitro diagnosis of malaria in an individual likely to be infected by P. falciparum, characterized in that it comprises the bringing of a tissue or biological fluid taken from an individual into contact with antibodies according to Claim 11, under conditions permitting an immunological reaction

in vitro between the said antibodies and the proteins specific to P. falciparum which are possibly present in the biological tissue, and the in vitro detection of the antigen/antibody complexes possibly formed.

15. Kit for the in vitro diagnosis of malaria according to Claim 12 or 13, characterized in that it comprises at least one or several molecules according to one of Claims 1 to 6,
the reagents for making up the appropriate medium for the reaction,
the reagents enabling the antigen/antibody complexes produced by the immunological reaction to be detected, it also being possible for these reagents to carry a label or to be capable of being recognized in their turn by a labelled reagent, more especially in the case where the abovementioned polypeptide molecule is not labelled.

16. Kit for the in vitro diagnosis of malaria, characrerized in that it comprises:
- antibodies according to Claim 11,
- the reagents for making up the appropriate medium for carrying out the immunological reaction,
- the reagents enabling the antigen/antibody complexes produced by the immunological reaction to be detectd, it also being possible for these reagents to carry a label or to be capable of being recognized in their turn by a labelled reagent, more especially in the case where the abovementioned antibodies are not labelled.

17. Use of a polypeptide molecule according to one of Claims 1 to 6 in the preparation of an antimalarial vaccine.

18. Use of one or more polyclonal or monoclonal antibodies according to Claim 11 for the preparation of a medicinal product intended for the treatment of malaria.

19. Pharmaceutical composition containing as active substance one or more polyclonal or monoclonal

antibodies according to Claim 11, in combination with an acceptable pharmaceutical vehicle.

20. Nucleic acid sequence, characterized by one of the following sequences:

(a) the linked succession of nucleotides as depicted in SEQ ID No. 1 of Figure 1, or

(b) the linked succession of nucleotides depicted in SEQ ID No. 2 of Figure 2,

(c) a linked succession displaying at least 70% homology with that of Figure 1 or of Figure 2, or

(d) a linked succession of nucleotides which are complementary to those presented in (a), (b) or (c).

21. Nucleic acid according to Claim 20, containing a sequence coding for a polypeptide molecule according to one of Claims 1 to 6.

22. Recombinant vector for the cloning of a nucleotide sequence according to Claim 20 or Claim 21 and/or the expression of a polypeptide encoded by the abovementioned sequence, containing the said sequence in one of the sites which is not essential for its replication, the said vector being, in particular, of the plasmid, cosmid or phage type.

23. Vector according to Claim 22, characterized in that it is a plasmid deposited at the CNCM under the No. I-1573 and referenced pK1.2.

24. Conjugates consisting of polypeptide molecules according to any one of Claims 1 to 6 and a support on which the said molecules are adsorbed.

25. Conjugates according to Claim 24, characterized in that the support consists of latex or polystyrene microspheres or beads.

26. Use of a conjugate according to one of Claims 24 and 25 in the immunization of individuals who are infected or likely to be infected with malaria.